Duke Power Company
Catawba Nuclear Station
4800 Concord Road
York, SC 29745

(803)831-3000

DUKE POWER

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RE: Catawba Nuclear Station
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Selected Licensee Commitments
Effective 08/20/95

Attached are revisions to the Catawba Nuclear Station Selected Licensee Commitments. Please revise your manual as follows:

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Any questions concerning this revision should be directed to the undersigned at (803)831-3151.

Kimberly A. Strickland

Kimberly A. Strickland
Regulatory Compliance

Attachments

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SELECTED LICENSEE COMMITMENTS MANUAL

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CATAWBA NUCLEAR STATION
FINAL SAFETY ANALYSIS REPORT
SELECTED LICENSEE COMMITMENTS
CHAPTER 16.7

INSTRUMENTATION

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16.7 INSTRUMENTATION

16.7-1 ATWS MITIGATION SYSTEM ACTUATION CIRUITRY (AMSAC)

COMMITMENT:

The AMSAC System shall be OPERABLE.

APPLICABILITY:

MODE 1, above 40% of RATED THERMAL POWER (based on Turbine Impulse Pressure).

REMEDIAL ACTION:

With the AMSAC System inoperable, restore it to OPERABLE status within 7 days or submit a Special Report to the Nuclear Regulatory Commission within the following 30 days. This report shall outline the cause of the malfunction and the plans for restoring the system to OPERABLE status.

TESTING REQUIREMENTS:

Perform a CHANNEL CALIBRATION on the AMSAC System instruments at least once per 18 months.

REFERENCES:

1) 10 CFR 50.62, Requirements for Reduction of Risk From Anticipated Transients Without Scram (ATWS) Events for Light-Water Cooled Nuclear Power Plants.

2) Generic Letter 85-06, "Quality Assurance Guidance for ATWS Equipment That Is Not Safety-Related."

3) Information Notice 92-06, "Reliability of ATWS Mitigation System and Other NRC Required Equipment Not Controlled by Plant Technical Specifications."

BASES:

Per 10 CFR 50.62, "Each pressurized water reactor must have equipment from sensor output to final actuation device, that is diverse from the reactor trip system, to automatically initiate the auxiliary feedwater system and initiate a turbine trip under conditions indicative of an ATWS. This equipment must be designed to perform its function in a reliable manner and be independent from the existing reactor trip system." When this rule was issued, the NRC did not require licensees to address the OPERABILITY of this equipment in the plant Technical Specifications nor require that this equipment be designated as safety-related.

On January 15, 1992, the NRC issued Information Notice 92-06 which discussed the reliability of AMSAC and other equipment not controlled by plant Technical Specifications. This notice described two separate incidents where violations were cited because the licensees failed to adequately maintain the reliability of their AMSAC systems. The NRC is concerned that licensees may not place an appropriate level of priority on resolving problems with the AMSAC System because it is not a safety-related system and because the plant's Technical Specifications do not govern its operability. The NRC considers the failure of licensees to adequately ensure the reliable operation of AMSAC equipment to be a significant regulatory concern.

This Selected Licensee Commitment was developed to ensure that appropriate attention is given to maintaining the AMSAC System in a reliable condition and that prompt action will be taken to repair and restore any AMSAC equipment that is discovered in a condition where it is incapable of performing its intended function.

16.7-2 SEISMIC INSTRUMENTATION

COMMITMENT:

a. The seismic monitoring instrumentation shown in Table 16.7-2A shall be OPERABLE.

APPLICABILITY:

At all times.

REMEDIAL ACTION:

a. With one or more of the above required seismic monitoring instruments inoperable for more than 30 days, prepare and submit a Special Report to the Commission pursuant to Technical Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the instrument(s) to OPERABLE status.

TESTING REQUIREMENTS:

a. Each of the above required seismic monitoring instruments shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK, CHANNEL CALIBRATION and ANALOG CHANNEL OPERATIONAL TEST operations at the frequencies shown in Table 16.7-2B.

b. Each of the above accessible seismic monitoring instruments actuated during a seismic event greater than or equal to 0.01 g shall be restored to OPERABLE status within 24 hours following the seismic event. Data shall be retrieved from actuated instruments and analyzed to determine the magnitude of the vibratory ground motion. Data retrieved from the triaxial time-history accelerograph shall include a post-event CHANNEL CALIBRATION obtained by actuation of the internal test and calibrate function immediately prior to removing data. CHANNEL CALIBRATION shall be performed immediately after insertion of the new recording media in the triaxial time-history accelerograph recorder. A Special Report shall be prepared and submitted to the Commission pursuant to Technical Specification 6.9.2 within 10 days describing the magnitude, frequency spectrum, and resultant effect upon facility features important to safety.

REFERENCES: N/A

BASES:

16.7-2 SEISMIC INSTRUMENTATION

The OPERABILITY of the seismic instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and evaluate the response of those features important to safety. This capability is required to permit comparison of the measured response to that used in the design basis for the facility to determine if plant shutdown is required pursuant to Appendix A of 10 CFR Part 100. The instrumentation is consistent with the recommendations of Regulatory Guide 1.12, "Instrumentation for Earthquakes," April 1974.

TABLE 16.7-2A

SEISMIC MONITORING INSTRUMENTATION

INSTRUMENTS AND SENSOR LOCATIONS	MEASUREMENT RANGE	MINIMUM INSTRUMENTS OPERABLE
1. Triaxial Time-History Accelerographs		
a. 1MIMT 5070 (Remote Sensor A) Containment Base Slab	-1 g to + 1 g	1
b. 1MIMT 5080 (Remote Sensor B) Containment Vessel Elev 619'5"	-1 g to + 1 g	1
c. 1MIMT 5090 (Starter Unit) Containment Base Slab	0.005 g to 0.05 g	1
2. Triaxial Peak Accelerographs		
a. 1MIMT 5010 - Containment Bldg. Elev 588' + 6 1/8"	0 g to + 2 g	1
b. 1MIMT 5020 - Containment Bldg. Elev 567'2½"	0 g to + 2 g	1
c. 1MIMT 5030 - Auxiliary Bldg. Elev 543'	0 g to + 2 g	1
3. Triaxial Seismic Switch		
1MIMT 5000 - Containment Base Slab	0.025 g to 0.25 g	1*
4. Triaxial Response-Spectrum Recorders		
a. 1MIMT 5040 - Containment Base Slab	0 to 34 g at 2 to 25 Hz	1*
b. 1MIMT 5050 - Containment Bldg. Elev 579'3½"	0 to 34 g at 2 to 25 Hz	1
c. 1MIMT 5060 - Auxiliary Bldg. Elev 577'	0 to 34 g at 2 to 25 Hz	1

*With reactor control room indication.

TABLE 16.7-2B

SEISMIC MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

INSTRUMENTS AND SENSOR LOCATIONS	CHANNEL CHECK	CHANNEL CALIBRATION	ANALOG CHANNEL OPERATIONAL TEST
1. Triaxial Time-History Accelerographs			
a. 1MIMT 5070 (Remote Sensor A) Containment Base Slab	M*	R	SA
b. 1MIMT 5080 (Remote Sensor B) Containment Vessel Elev 619'5"	M*	R	SA
c. 1MIMT 5090 (Starter Unit) Containment Base Slab	N.A.	R	SA
2. Triaxial Peak Accelerographs			
a. 1MIMT 5010 - Containment Bldg. Elev 588' + 6 1/8"	N.A.	R	N.A.
b. 1MIMT 5020 - Containment Bldg. Elev 567' 2½"	N.A.	R	N.A.
c. 1MIMT 5030 - Auxiliary Bldg. Elev 543'	N.A.	R	N.A.
3. Triaxial Seismic Switch			
1MIMT 5000 - Containment Base Slab**	M	R	SA
4. Triaxial Response-Spectrum Recorders			
a. 1MIMT 5040 - Containment Base Slab**	M	R	SA
b. 1MIMT 5050 - Containment Bldg. Elev 579' 3½"	N.A.	R	N.A.
c. 1MIMT 5060 - Auxiliary Bldg. Elev 577'	N.A.	R	N.A.

*Except seismic trigger.

**With reactor control room indications.

16.7-3 METEOROLOGICAL INSTRUMENTATION

COMMITMENT:

a. The meteorological monitoring instrumentation channels shown in Table 16.7-3A shall be OPERABLE.

APPLICABILITY:

At all times.

REMEDIAL ACTION:

a. With one or more required meteorological monitoring channels inoperable for more than 7 days, prepare and submit a Special Report to the Commission pursuant to Technical Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the channel(s) to OPERABLE status.

TESTING REQUIREMENTS:

a. Each of the above meteorological monitoring instrumentation channels shall be demonstrated OPERABLE by the performance of the CHANNEL CHECK and CHANNEL CALIBRATION operations at the frequencies shown in Table 16.7-3B.

REFERENCES: N/A

BASES:

16.7-3 METEOROLOGICAL INSTRUMENTATION

The OPERABILITY of the meteorological instrumentation ensures that sufficient meteorological data are available for estimating potential radiation doses to the public as a result of routine or accidental release of radioactive materials to the atmosphere. This capability is required to evaluate the need for initiating protective measures to protect the health and safety of the public and is consistent with the recommendations of Regulatory Guide 1.23, "Onsite Meteorological Programs," February 1972.

TABLE 16.7-3A

METEOROLOGICAL MONITORING INSTRUMENTATION

INSTRUMENT	LOCATION	MINIMUM OPERABLE
1. Wind Speed		
a. Meteorological Tower	Nominal Elev. 661'10"	1
b. Meteorological Tower	Nominal Elev. 768'10"	1
2. Wind Direction		
a. Meteorological Tower	Nominal Elev. 661'10"	1
b. Meteorological Tower	Nominal Elev. 768'10"	1
3. Air Temperature - ΔT		
Meteorological Tower	Nominal Elev. 768'10"-661'10"	1

TABLE 16.7-3B

METEOROLOGICAL MONITORING INSTRUMENTATION
SURVEILLANCE REQUIREMENTS

INSTRUMENT	CHANNEL CHECK	CHANNEL CALIBRATION
1. Wind Speed		
a. Nominal Elev. 661' 10"	D	SA
b. Nominal Elev. 768' 10"	D	SA
2. Wind Direction		
a. Nominal Elev. 661' 10"	D	SA
b. Nominal Elev. 768' 10"	D	SA
3. Air Temperature - ΔT		
Nominal Elev. 768'10" - 661'10"	D	SA

16.7-4 LOOSE-PART DETECTION SYSTEM

COMMITMENT:

The Loose-Part Detection System shall be OPERABLE.

APPLICABILITY:

MODES 1 and 2.

REMEDIAL ACTION:

a. With one or more Loose-Part Detection System channels inoperable for more than 30 days, prepare and submit a Special Report to the Commission pursuant to Technical Specification 6.9.2 within the next 10 days outlining the cause of the malfunction and the plans for restoring the channel(s) to OPERABLE status.

TESTING REQUIREMENTS:

a. Each channel of the Loose-Part Detection Systems shall be demonstrated OPERABLE by performance of:

   1. A CHANNEL CHECK at least once per 24 hours,

   2. An ANALOG CHANNEL OPERATIONAL TEST except for verification of Setpoint at least once per 31 days, and

   3. A CHANNEL CALIBRATION at least once per 18 months.

REFERENCES: N/A

BASES:

16.7-4 LOOSE-PART DETECTION SYSTEM

The OPERABILITY of the loose-part detection instrumentation ensures that sufficient capability is available to detect loose metallic parts in the Reactor System and avoid or mitigate damage to Reactor System components. The allowable out-of-service times and surveillance requirements are consistent with the recommendations of Regulatory Guide 1.133, "Loose-Part Detection Program for the Primary System of Light-Water-Cooled Reactors," May 1981.

16.7 INSTRUMENTATION

16.7-5 TURBINE OVERSPEED PROTECTION

COMMITMENT:

a. At least one Turbine Overspeed Protection System shall be OPERABLE.

APPLICABILITY: MODES 1, 2, and 3.

REMEDIAL ACTION:

a. With one stop valve or one control valve per high pressure turbine steam line inoperable and/or with one intermediate stop valve or one intercept valve per low pressure turbine steam line inoperable, restore the inoperable valve(s) to OPERABLE status within 72 hours, or close at least one valve in the affected steam line(s) or isolate the turbine from the steam supply within the next 6 hours.

b. With the above required Turbine Overspeed Protection System otherwise inoperable, within 6 hours isolate the turbine from the steam supply.

TESTING REQUIREMENTS:

a. The above required Turbine Overspeed Protection System shall be demonstrated OPERABLE:

1. At least once per 7 days while in MODE 1 and while in MODE 2 with the turbine operating, by cycling each of the following valves through at least one complete cycle from the running position:

   a) Four high pressure turbine stop valves,
   b) Six low pressure turbine intermediate stop valves, and
   c) Six low pressure turbine intercept valves.

2. At least once per 31 days while in MODE 1 and while in MODE 2 with the turbine operating, by direct observation of the movement of each of the above valves and the four high pressure turbine control valves, through one complete cycle from the running position,

3. At least once per 18 months by performance of a CHANNEL CALIBRATION on the Turbine Overspeed Protection Systems, and

4. At least once per 40 months by disassembling at least one of each of the above valves (including the four high pressure turbine control valves) and performing a visual and surface inspection of valve seats, disks and stems and verifying no unacceptable flaws or corrosion.

REFERENCES: N/A

BASES:

16.7-5 TURBINE OVERSPEED PROTECTION

This commitment is provided to ensure that the turbine overspeed protection instrumentation and the turbine speed control valves are OPERABLE and will protect the turbine from excessive overspeed. Protection from turbine excessive overspeed is required since excessive overspeed of the turbine could generate potentially damaging missiles which could impact and damage safety-related components, equipment, or structures.